



MANUAL LIFTING ROTARY EVAPORATOR LMRE-A20

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Manual Lifting Rotary Evaporator LMRE-A20 is 5 L heating bath with a wide temperature ranges from room temperature to 180°C. The speed ranges from 20 to 200 rpm, timing interval operation in clockwise and anticlockwise directions for drying process. Rotary evaporator design is composed of standard set of heating bath, set of glassware, vertical 1000 ml evaporating flask (NS 29/32) and receiving flask (KS 35/20). The manual lift is combined with an auxiliary lift for precise positioning of the glassware. Others like Vacuum pump, Low temperature circulator, Vacuum controller are optional accessories. Designed with LED display to observe speed, temperature and time. It is basic chemical laboratory instrument suitable for evaporation, distillation and separation of chemicals.

FEATURES

- Designed with PID control ensures high temperature system
- Offers manual lift combined with auxiliary lift for precise positioning of the glassware
- Overheating protection temperature is 220°C
- Boil-dry protection, automatically power off if heating without water/oil in the heating bath
- Speed ranges from 20 to 200 rpm
- Adopts timing interval operation in clockwise and anticlockwise directions for drying process
- Designed with Patented condenser, patented double spring sealing ring and Ejection mechanism ensures easy exchange of evaporating flask
- 5L heating bath with a wide temperature range, independent temperature control, make it can be used separately
- Water/oil heating mode can be changed only through a switch
- Adjustable immersion angle
- Designed with LED display to observe speed, temperature and time
- Patented double spring sealing ring which is made of PTFE provides an excellent sealing performance
- Remote function provides PC control and data transmission

APPLICATIONS

Manual Lifting Rotary Evaporator is used for flavor extraction in food industry, solvent removal in separation and recycling chemical / educational / fuel / environmental industry , to determine sample concentration , HPLC and natural product sample preparation , drying down powders (using test tube adapter) and trapping hazardous waste liquid.

SPECIFICATION

Model	LMRE-A20
Motor Type	Brushless DC motor
Speed Range	20 to 200 rpm
Display	LED (speed, temperature, time)
Clockwise and Anti-clockwise	Yes
Heating Temperature Range	Room temp. to 180°C
Control Accuracy	Water: $\pm 1^{\circ}\text{C}$
Stroke Displacement	Manual 110 mm + auxiliary 100 mm
Interval Time Setting Range	1 to 999 s
Protection Class	IP20
USB Interface	Yes
Heating Power	1200 W
Permissible Ambient Temperature	5 to 40°C
Permissible Relative Humidity	$\leq 80\% \text{ RH}$
Dimension	Main Unit: 440 × 320 × 450 mm
	Heating Bath: 300 × 300 × 240 mm
Power Consumption	1245W
Power Supply	100 to 120/200 to 240V, 50/60 Hz
Weight	Main Unit: 7 kg
	Heating Bath: 3 kg

VACUUM CONTROLLER

Vacuum setting range	1 to 1000 mbar
Vacuum measurement range	1 to 1000 mbar
Control operation mode	Single-point control mode,
	Programmed control mode
Control program	Can store up to 5 programs, each containing 5-step control (capable to set the degree of vacuum and time)
Setting method	Touch screen setting
Display	5 inches TFT
Sensory overload pressure	1,500 mbar
Connector diameter	8 mm
Materials in contact with vapor	PTFE, PP, silicone and ceramics
Temperature range	10 to 40°C
Humidity	$\leq 80\% \text{ RH}$
Dimension	189 × 207 × 193 mm
Power Consumption	600 W
Power Supply	110 to 240 V, 50 Hz/60 Hz
Weight	4.0 kg

CHEMICAL RESISTANT VACUUM PUMP

Maximum Vacuum	13 mbar
Work Mode	Continuous Operation
Nozzle Size	8 mm
Motor Speed	1450 rpm
Flow Rate	25 L/min
Power	95 W

LOW TEMPERATURE CIRCULATOR

Model	Circulator 01	Circulator 02
Range of temperature control	-15°C	-20°C
Temperature adjustment accuracy	0.1°C	0.1°C
Temperature control accuracy	± 1.0°C (-20°C to 0°C typical value ± 0.5°C (0°C to 20°C typical value))	± 1.0°C (-20°C to 0°C typical value 0.5°C (0°C to 20°C typical value))
Reservoir capacity	5 L	5 L
Range of temperature adjustment	-30°C to 30°C	-30°C to 30°C
Temperature display	LED	LED
Type of temperature sensor	PT 1000	PT 1000
Compressor refrigerant	R290	R290
Circulating pump throughput	12 L/min	12 L/min
Circulating pump head	6 m	6 m
In-out cycle interface	12 mm pagoda-type interface	12 mm pagoda-type interface
RS232 interface	Yes	Yes
Temperature range	10 to 40°C	10 to 40°C
Humidity	≤ 80 % RH	≤ 80 % RH
Dimension	370 × 420 × 730 mm with caster	440 × 460 × 730 mm with caster
Power Consumption	350 W	700 W
Power Supply	220 V, 50 Hz/60 Hz	220 V, 50 Hz/60 Hz, 110 V, 50 Hz/60 Hz
Weight	46 kg	50 kg

OPTIONAL ACCESSORIES

Accessories no.	Name
1	Evaporating flask 50 ml NS 29/32
2	Evaporating flask 100 ml NS 29/32
3	Evaporating flask 250 ml NS 29/32
4	Evaporating flask 500 ml NS 29/32
5	Chemical resistant vacuum pump
6	Vacuum controller
7	Low Temperature Circulator